ABSTRACT

The invention relates to a catalyst system for the selective trimerisation of olefins, which system is based on a titanium complex of formula $(Cp\text{-}B(R)_nAr)TiR^1_3$, wherein:

Cp is a cyclopentadienyl type ligand, optionally substituted,

B is a bridging group, based on a single atom selected from the groups 13 to 16 inclusive of the Periodic System,

Ar is a aromatic group, optionally substituted,

R is, independently, hydrogen, or a hydrocarbon residue, optionally being substituted and optionally containing heteroatoms, or groups R and B are joined together to form a ring,

n is an integer equal to the (valency of B minus 2), and

R^1 is a mono-anionic group, and further comprises an activator. The present catalyst system obviates the use of toxic chromium compounds.